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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/751,512	01/06/2004	Tatsuya Ito	113112.01	3327

7590 10/13/2006

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EXAMINER	
MRUK, GEOFFREY S	

ART UNIT	PAPER NUMBER
2853	

DATE MAILED: 10/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/751,512	ITO ET AL.	
	Examiner	Art Unit	
	Geoffrey Mruk	2853	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 July 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *41-44* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *41-44* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☒ Certified copies of the priority documents have been received in Application No. 10/186,427.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 41-44 are rejected under 35 U.S.C. 102(e) as being anticipated by Shigemura (US 6,667,795 B2).

With respect to claim 41, Shigemura discloses an apparatus (Fig. 14) for manufacturing a color filter (Column 1, lines 15-24), comprising: a plurality of nozzles (Fig. 16, elements 108) for ejecting a filter material in droplets (Column 1, lines 26-33); and a plurality of ejection heads (Fig. 16, elements 120a, 120b, 121a, 121b, 122a, 122b) which are arranged perpendicular to a head scan direction (Fig. 13, element 612) arranged on a print head (Fig. 16, element 606), each ejection head which ejects a different filter material (Column 13, line 53) having the plurality of nozzles linearly arranged with a constant layout pitch of (D) (Fig. 23, Nozzle Pitch), the plurality of ejection heads are arranged on the print head to form at least a single linear row of nozzles (Fig. 16, center line of nozzles, i.e. y direction) which is arranged perpendicular to the head scan direction (Fig. 13, element 612), wherein a plurality of types of filter

material (Column 10, lines 48-52) are each concurrently ejected (Column 24, lines 35-39) from the nozzles in the single linear row of nozzles on the print head.

With respect to claim 42, Shigemura discloses an apparatus (Fig. 14) for manufacturing an electroluminescence substrate (Column 1, lines 15-24), comprising: a plurality of nozzles (Fig. 16, elements 108) for ejecting a filter material in droplets (Column 1, lines 26-33); and a plurality of ejection heads (Fig. 16, elements 120a, 120b, 121a, 121b, 122a, 122b) which are arranged perpendicular to a head scan direction (Fig. 13, element 612) arranged on a print head (Fig. 16, element 606) each ejection head which ejects a different filter material (Column 13, line 53) having the plurality of nozzles linearly arranged with a constant layout pitch of (D) (Fig. 23, Nozzle Pitch), the plurality of ejection heads are arranged on the print head to form at least a single linear row of nozzles (Fig. 16, center line of nozzles, i.e. y direction) which is arranged perpendicular to the head scan direction (Fig. 13, element 612), wherein a plurality of types of filter material (Column 10, lines 48-52) are each concurrently ejected (Column 24, lines 35-39) from the nozzles in the single linear row of nozzles on the print head.

With respect to claim 43, Shigemura discloses a method for manufacturing a color filter (Columns 7-11), comprising: scanning a substrate by moving a table (Fig. 14, elements 603, 604) and a plurality of ejection heads (Fig. 16, elements 120a, 120b, 121a, 121b, 122a, 122b) which are arranged perpendicular to a head scan direction (Fig. 13, element 612) arranged on a print head (Fig. 16, element 606); and ejecting a plurality of types of filter material (Column 10, lines 48-52) in droplets (Column 1, lines 26-33) by the plurality of ejection heads each ejection head which eject a different filter

material (Column 13, line 53) having a plurality of nozzles (Fig. 16, elements 108) arranged with a constant layout pitch of (D) (Fig. 23, Nozzle Pitch), the plurality of ejection heads being linearly arranged to form at least a single linear row of nozzles (Fig. 16, center line of nozzles, i.e. y direction) which is arranged perpendicular to the head scan direction (Fig. 13, element 612), wherein a plurality of types of filter material (Column 10, lines 48-52) are each concurrently ejected (Column 24, lines 35-39) from the nozzles in the single linear row of nozzles on the print head.

With respect to claim 44, Shigemura discloses a method for manufacturing an electroluminescence substrate (Columns 26-27), comprising: scanning a substrate by moving a table (Fig. 14, elements 603, 604) and a plurality of ejection heads (Fig. 16, elements 120a, 120b, 121a, 121b, 122a, 122b) which are arranged perpendicular to a head scan direction (Fig. 13, element 612) arranged on a print head (Fig. 16, element 606); and ejecting a plurality of types of functional layer forming material (Column 27, lines 30-34) in droplets (Column 1, lines 26-33) by a plurality of ejection heads, each ejection head which eject a different filter material (Column 13, line 53) having a plurality of nozzles arranged with a constant layout pitch of (D) (Fig. 23, Nozzle Pitch), the plurality of ejection heads being linearly arranged to form at least a single linear row of nozzles (Fig. 16, center line of nozzles, i.e. y direction) which is arranged perpendicular to the head scan direction (Fig. 13, element 612), wherein a plurality of types of filter material (Column 10, lines 48-52) are each concurrently ejected (Column 24, lines 35-39) from the nozzles in the single linear row of nozzles on the print head.

Response to Arguments

Applicant's arguments filed 21 July 2006 have been fully considered but they are not persuasive. The applicant's argument that "Claim 41 recites, and in like manner, claims 42-44 recite, among other features, a plurality of ejection heads which are arranged perpendicular to a head scan direction arranged on a print head, each ejection head which ejects a different filter material having the plurality of nozzles linearly arranged with a constant layout pitch of (D), the plurality of ejection heads are arranged on the print head to form at least a single linear row of nozzles which is arranged perpendicular to the head scan direction, wherein a plurality of types of filter material are each concurrently ejected from nozzles in the single linear row of nozzles on the print head. No such combination of features, as quoted above, is taught, or can reasonably be considered to have been suggested, by Shigemura" is not persuasive.

However, as stated in the instant rejection and by applicant's remarks, Shigemura discloses an ink jet head unit (Fig. 13, element 606) where "Although FIG. 13 illustrates the ink jet heads being individually provided for the three colors of R, G, and B, the heads themselves for these three colors are each of identical configuration, so FIG. 18 representatively illustrates the structure of one of the RGB color heads" (Column 16, lines 51-56) and "reference numeral 612 denotes a head Θ motor attached above the head units 606 for rotating the entire head unit" (Column 14, lines 14-15), thus allowing the nozzles to be arranged perpendicular to the head scan direction. Therefore, Shigemura meets the claimed limitations. The examiner notes that the applicant's argument is at paragraph [146] of the disclosure.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Geoffrey Mruk whose telephone number is 571 272-2810. The examiner can normally be reached on 7am - 330pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on 571 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

GSM
10/6/2006

GM

STEPHEN MEIER
SUPERVISORY PATENT EXAMINER